From glowbugs@devp214.theporch.com Fri Jan 31 12:37:58 1997
Return-Path: <glowbugs@devp214.theporch.com>
Received: from devp214.theporch.com (devp214.theporch.com [192.150.244.22])
          by uro.theporch.com (8.8.5/AUX-3.1.1)
          with ESMTP id MAA11447 for <shimshon@theporch.com>;
          Fri, 31 Jan 1997 12:37:57 -0600 (CST)
From: glowbugs@devp214.theporch.com
Received: from devp214.theporch.com (localhost [127.0.0.1])
          by devp214.theporch.com (8.8.4/SCO-5.0.2) with SMTP
       id SAA03091; Fri, 31 Jan 1997 18:35:45 GMT
Date: Fri, 31 Jan 1997 18:35:45 GMT
Message-Id: <199701311835.SAA03091@devp214.theporch.com>
Errors-To: ws4s@infoave.net
Reply-To: glowbugs@devp214.theporch.com
Originator: glowbugs@devp214.theporch.com
Sender: glowbugs@devp214.theporch.com
Precedence: bulk
To: Multiple recipients of list <glowbugs@devp214.theporch.com>
Subject: GLOWBUGS digest 432
X-Listprocessor-Version: 6.0 -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: O

GLOWBUGS Digest 432

Topics covered in this issue include:

Date: Thu, 30 Jan 1997 12:36:28 -0800
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Re: Grid Leak resistor/capacitor duo in regens
Message-ID: <199701302036.MAA12190@dfw-ix3.ix.netcom.com>

John wrote:

>I might add another 2 cents to this discussion, and someone please
>correct me if I'm wrong. The way I understand this is that the
>resistor functions as a grid leak in exactly the way as mike described
>above. But further, the cap and resistor values are selected such that
>the RC circuit they form has a time constant which is long for RF but
>short for AF. Thus, the cap discharges at an AF rate, following the
>amplitude envelope of the modulated RF....

John is quite right that the time constant of the grid leak components
do affect the AF response, and one of the problems with many early BC
receivers which used grid leak detectors was their poor audio frequency
response. Using a "standard" 100 pF / 1 Megohm combination gives a
time constant of .1 mS, corresponding to a rolloff around 3 kHz. The
requirements for optimum detector biasing and good audio frequency
response required compromises in this case. Once RF (and IF)
amplifiers became simple and effective receiver designers went to
higher-level detectors that didn't require this delicate balancing act.

At least, that's the way I hear'ed it...

73,
Mike, KK6GM

Date: Thu, 30 Jan 1997 14:19:57 -0700
From: jeffd@coriolis.com (Jeff Duntemann)
To: mjsilva@ix.netcom.com
Cc: glowbugs@theporch.com
Subject: Re: Grid Leak resistor/capacitor duo in regens
Message-ID: <1.5.4.32.19970130141255.00f5c5b8@165.247.88.2>

At 08:37 PM 1/30/97 GMT, KK6GM wrote:

>John is quite right that the time constant of the grid leak components
>do affect the AF response, and one of the problems with many early BC
>receivers which used grid leak detectors was their poor audio frequency
>response. Using a "standard" 100 pF / 1 Megohm combination gives a
>time constant of .1 mS, corresponding to a rolloff around 3 kHz. The
>requirements for optimum detector biasing and good audio frequency
>response required compromises in this case. Once RF (and IF)
>amplifiers became simple and effective receiver designers went to
>higher-level detectors that didn't require this delicate balancing act.

3-5 Khz isn't bad for CW, though I would like better for hi-fi AM shortwave
listening. Is there some sort of bandwidth or Q tradeoff anywhere? The

choice of specific grid leak values always seemed purest magic to me. Given the proper time constant, what happens otherwise if you increase the C while reducing the R, or vice versa?

If there were to be an "ideal" grid leak combination for CW work, what would it be?

--73--

--Jeff Duntemann KG7JF
  Scottsdale, Arizona

Date: Thu, 30 Jan 1997 13:22:40 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: jeffd@coriolis.com (Jeff Duntemann), jeffd@coriolis.com,
Subject: Re: 10m amp
Message-ID: <199701302122.QAA06510@news2.mnsinc.com>

Jeff and the group - I know that 807s CAN be used at 28 MHZ
but as far as neutralizing them, yes it depends somewhat on the level
of gain you run.

As to the sweep tubes, well, YAESU and others have successfully run
sweep tubes up to 28 MHZ just fine, but the neutralizing DOES get
finicky because different brands of tubes tend to have widely varying
interelectrode capacitances, and setting the stage for good
neutralization with one bottle may not work with another.
Also, the procedure for neutralizing the things gets very complicated
in a bandswitching / multi-band transmitter of that type.
This is why I LOVE grounded grid amplifiers so much!
At lot easier to get them to settle down!

On 30 Jan 97 at 15:40, Jeff Duntemann spoke about Re: 10m amp and
said:

> Jeff--
>
> I'm by no means an expert, but from my experience I would suggest a 6146B.
> They're easily available, though what "cheap" means is unclear here. I got
> a box full of 829Bs for $5, so that's what I use now for this sort of
> service. But you can't always lay hands on an 829B when you need one.
>
> One suggestion I would have (from ugly experience) is stay away from sweep
> tubes at 10M. I know other people have used them successfully, but I tried
> a couple of times years ago and could NOT make the damned things settle down

> and be good.
>
> 5w to 30w is not a great deal of power gain, so stability shouldn't be tough
> with a tube intended to work at that frequency.
>
> I've used 6146B's as high as 6M and never had trouble neutralizing them so
> they stay neutralized.
>
> Good luck and let us know how you do.
>
> --73--
>
> --JD--
>
>
> At 01:00 AM 1/30/97 GMT, you wrote:
> >I've got an 11m rig that I'm converting to 10m and would like to
> >built a single tube amp for it. For 5w drive what tube do you
> >suggest for an output of say, 25-30w at 28 Mc? (Only requirements
> >are cheap and easily available!)
> >
> >Jeff KH2PZ
> >
> >
>
>
>
****
*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com   *
*** See the great ham radio resources at: *
** http://www.mnsinc.com/bry/   *
****

Date: Thu, 30 Jan 1997 21:29:33 +0000
From: Bob Roach <KE4QOK@worldnet.att.net>
To: qrp-l@lehigh.edu, glowbugs@theporch.com, boatanchors@theporch.com
Cc: jroccaro@chesco.com
Subject: Re: Powerline Noise...Solution
Message-ID: <19970130212926.AAB3275@LOCALNAME>

At 09:18 PM 1/29/97 +0000, you wrote:

>The is a book out on interference written by an ex-power company employee
>who did just this as his job. Apparently power companies are concerned
>enough to have specially trained people assigned to this work. But you

>need to work with them or they can decide that your problem is too
>expensive to bother with - I don't know what legal rights you have if it
>comes to this.
>

Hello All,

All utilities have employees who track down and correct interference. My dad did this for many years before he retired. If there is any intereset I could get hold of him and find out what the exact legal rights of the customer are and what the basic procedure is for getting the best results.

                                                    (o   o)
_____________________oOO_( )_OOo_________
73 es TNX
KE4QOK   Real radios glow in the dark.
Bob   Power is no substitute for skill.
              If it stayed up last winter, it was too small.
136 Hermitage Rd.
Newport News, Va. 23606 KE4QOK@worldnet.att.net
(757)930-0348

Date: Thu, 30 Jan 1997 19:13:07 -0600 (CST)
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Re: 807's & 1625's @ 10M
Message-ID: <199701310113.TAA16383@dfw-ix12.ix.netcom.com>

Jeff wrote:
>
>Michael and Ralph both suggest 807s or 1625's for linear service at
>10m. I've never tried this, because I've read in any number of places
>that these tubes are very lossy above 20 Mc...

I haven't tried them there myself, but the data book talks about full ratings to 60 MHz, 80% at 80 MHz and 55% at 125 MHz. That sure *sounds* like a tube that should work at 28! As a point of comparison the 813 is useable at full ratings up to 30 MHz, and I've seen 10 meter amps using them.

73,
Mike, KK6GM

End of GLOWBUGS Digest 432
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